April 8, 2004

Via E-Mail CONFIDENTIAL

Mr. Glen Googins
Senior Assistant City Attorney
City Attorney's Office
City of Chula Vista
276 4th Avenue
Chula Vista, California 91910

Subject: **Independent Review of Municipal Energy Utility Feasibility Analysis**

Dear Mr. Googins:

On November 10, 2003, the City of Chula Vista ("City") retained R. W. Beck, Inc. ("R. W. Beck") to provide an Independent Review of the City of Chula Vista Municipal Energy Utility Feasibility Analysis Phase I Report ("Feasibility Analysis") dated October 10, 2003, prepared by Duncan, Weinberg, Genzer & Pembroke, P.C.; McCarthy & Berlin, L.L.P.; and Navigant Consulting, Inc. ("Duncan, McCarthy, and Navigant").

In this Independent Review, R. W. Beck has performed a high-level fatal flaw analysis of the strengths and weaknesses of the Feasibility Analysis. Specifically, R. W. Beck has provided an Independent Review that includes:

- the identification and assessment of key assumptions to determine reasonableness;
- a critical review of the methodology employed to analyze the options;
- a general assessment of the Feasibility Analysis assumptions, conclusions and recommendations; and
- suggested improvements.

In our experience, the firms that performed the Feasibility Analysis (Duncan, McCarthy, and Navigant) have a long history of providing quality service to cities such as the City of Chula Vista. This Independent Review is intended to draw on R. W. Beck's experience in terms of preparing and presenting similar analysis and recommendations to public agencies, such as the City. Our comments, observations, and recommendations are intended to provide constructive feedback and observations that will better prepare the City and its consultants for upcoming public discussion on the Feasibility Analysis.

The R. W. Beck Independent Review is presented in sections. These include:

- General Comments
- Community Choice Aggregation ("CCA")
- Greenfield Development ("GD")
- Combined ("CCA/GD")
- Municipal Distribution Utility ("MDU")
- Gas Case

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As requested by the City, each section includes a review of the assumptions, methodology, and an assessment of the conclusions and recommendations. Organizing the Independent Review in this manner has produced some duplication of issues because they apply to two or more sections.

General Comments

Assumptions

- A discount rate of 10% is used for Net Present Value ("NPV") calculations. This rate is unusually high for a public entity. Most publicly owned enterprises are using discount rates in the 6% to 7% range given today's market. The impact of lowering the discount rate would be to raise the expected savings over the life of the analysis, since future savings are discounted at a lower rate. It is also important to note that the NPV savings are but one measure of performance. Review of cash flow, nominal dollar savings, and annual net income are also important factors.
- Exit fees (California Cost Responsibility Surcharge for Municipal Departing Load) seem high at the end of the study period. These fees primarily include (1) California Department of Water Resources (CDWR) bond charges; (2) CDWR Power Charges; and (3) the "Tail Competitive Transaction Charge" (Tail CTC). It remains unclear what the eventual magnitude of these fees will be. The Feasibility Analysis assumes a high exit fee scenario based on methodology established by the California Public Utilities Commission (CPUC) in determination of Direct Access Cost Responsibility Surcharge (DA CRS) issued on November 7, 2002 (Decision 02-11-022). This is a sound methodology; however, it is highly likely that exit fees within the SDG&E service area in particular will be lower relative to SCE and PG&E, since SDG&E had less exposure to the CDWR charges. The impact of lower exist fees will be to improve the savings under applicable models (CCA, MDU and Greenfield Development). The CPUC is continuing to debate exit fees in R.02-01-011 (Municipal Departing Load Exit Fee) and R.03-10-003 (Community Choice Aggregation Exit Fees).
- The schedules for implementation are very optimistic. In each case, the schedule for implementation is more rapid than what is likely to occur, particularly if SDG&E decides to oppose the initiative. The long end of the range provided for implementation is what could reasonably be expected.

Methodology

- Feasibility Analysis spreadsheets provided to us by Navigant do not contain the formulae or sufficient detail to document that all potential costs were included in the analysis. Examples include generation capacity reserve costs and financial reserves for debt service coverage. It is important to recognize that the formulae contained in the model are proprietary and the model contains the intellectual property of the consultant. Therefore, it is not expected that information other than the results would be made available. During the course of our discussions, Duncan, McCarthy, and Navigant represented that all such applicable costs are

included in the Feasibility Analysis. Based on this limited review, it appears that the methodology employed in the models used for this analysis is consistent with industry practice.

- Some sensitivity analyses around key assumptions could be beneficial. For example, a range of potential assumptions should be shown for:
  - Different energy supply costs, including gas prices. (±20%)
  - Lower distribution system purchase cost (–20%), but higher severance fees. (+100%)
  - Distribution O&M costs. (±10%)
  - Exit fees. (–25% to ±10%)

Conclusion and Recommendation

- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.
- Exit fees are likely to decrease with time as existing obligations are restructured or expire. Lower exit fees will result in greater savings to the City.

Community Choice Aggregation (CCA)

Assumptions

- A key assumption in the Feasibility Analysis is that SDG&E will meet power supply from the market and pay a 5% premium to market, while Chula Vista generates 80% of its supply. A more conservative approach for planning purposes would be to assume SDG&E power supply costs at market prices or that SDG&E develops a power supply portfolio that includes ownership of generation. Sensitivity could then be analyzed assuming variation of SDG&E cost either above or below market.
- Power plant costs for Chula Vista appear to be optimistic given R. W. Beck's experience.

Cost Element	Analysis	R. W. Beck
Capital cost	$600/kW	$850/kW
Variable O&M	$2/MWh	$2/MWh
Fixed O&M	—	$4/MWh
Heat rate	7,000 MMBtu/kWh	7,500 MMBtu/kWh
Gas price escalation	+0.7%/yr	2.3%/yr

Costs can vary, depending on various conditions, including location, existing infrastructure, access to fuel, electrical transmission facilities, water supply, and emission restrictions.

- SDG&E prices are based on market prices that are projected to increase by 35% over the study period, while Chula Vista supply costs (per kWh) increase by only 8% due to low gas price escalation. This divergence results in a lower cost resource for the City.
- Exit fees are likely to decline over time as existing obligations are restructured or expire. Lower exit fees will result in greater savings to the City.
- It would be helpful to have a discussion of economic effect of customers opting out of CCA, since it is unlikely that there will be 100% participation.

Methodology

- No comments.

Conclusions and Recommendations

- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.
- Exit fees are likely to decrease with time as existing obligations are restructured or expire. Lower exit fees will result in greater savings to the City.
- Something less than 100% participation should be assumed in the CCA Base Case analysis, since it is unlikely that no customers will opt out of the CCA program.
- There should be more consistency in power supply costs between SDG&E and Chula Vista (at a minimum in a sensitivity analysis).

Greenfield Development (GD)

Assumptions

- An assumption contained in the Feasibility Analysis for GD capital costs is that service installation will be paid by the City. It is common industry practice for developers to pay for most costs associated with utility service to new development. To the extent that some or all of these costs are funded by developers, the economics of this business case will be improved.

Methodology

- There are potential reliability issues with spot systems that are served through one facility. Failure of a single facility can result in longer outages, unless there are other options for routing service, such as loop feeds. Generally, the more redundancy that is designed into the service, the greater the cost. Utilities have a rather wide range of practice when it comes to distribution system design.

Conclusions and Recommendations

- There is a fairly long lead time before GD becomes economic. Such a lengthy gap between implementation and savings creates risk to the City, particularly if the CCA or MDU options fail to be implemented.
- Developer funding of GD utility infrastructure should be equal to what would be contributed to SDG&E.
- There should be discussion of adverse reliability issues in GD due to limited ability or additional costs to loop feed to spot systems.
- The City should make certain that it will move forward and likely be successful with the implementation of either CCA and/or MDU before committing to this option.
- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.

Combined (CCA/GD)

Assumptions

- A key assumption in the Feasibility Analysis is that SDG&E will meet power supply from the market and pay a 5% premium to market, while Chula Vista generates 80% of its supply. A more conservative approach for planning purposes would be to assume SDG&E power supply costs at market prices or that SDG&E develops a power supply portfolio that includes ownership of generation. Sensitivity could then be analyzed assuming variation of SDG&E cost either above or below market.
- Power plant costs for Chula Vista appear to be optimistic given R. W. Beck's experience.

Cost Element	Analysis	R. W. Beck
Capital cost	$600/kW	$850/kW
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Costs can vary, depending on various conditions, including location, existing infrastructure, access to fuel, electrical transmission facilities, water supply, and emission restrictions.

- SDG&E prices are based on market prices that are projected to increase by 35% over the study period, while Chula Vista supply costs (per kWh) increase by only 8% due to low gas price escalation. This divergence results in a lower cost resource for the City.

- Exit fees are likely to decline over time as existing obligations are restructured or expire. Lower exit fees will result in greater savings to the City.
- It would be helpful to have a discussion of economic effect of customers opting out of CCA, since it is unlikely that there will be 100% participation.
- An assumption contained in the Feasibility Analysis for GD capital costs is that service installation will be paid by the City. It is common industry practice for developers to pay for most costs associated with utility service to new development. To the extent that some or all of these costs are funded by developers, the economics of this business case will be improved.

Methodology

- There are potential reliability issues with spot systems that are served through one facility. Failure of a single facility can result in longer outages, unless there are other options for routing service, such as loop feeds. Generally, the more redundancy that is designed into the service, the greater the cost. Utilities have a rather wide range of practice when it comes to distribution system design.

Conclusions and Recommendations

- Developer funding of GD utility infrastructure should be equal to what would be contributed to SDG&E.
- There should be discussion of adverse reliability issues in GD due to limited ability or additional costs to loop feed to spot systems.
- The City should make certain that it will move forward and likely be successful with the implementation of either CCA and/or MDU before committing to the GD option.
- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.
- There should be more consistency in power supply costs between SDG&E and Chula Vista (at a minimum in a sensitivity analysis).

Municipal Distribution Utility (MDU)

Assumptions

- A key assumption in the Feasibility Analysis is that SDG&E will meet power supply from the market and pay a 5% premium to market, while Chula Vista 80% of its supply. A more conservative approach for planning purposes would be to assume SDG&E power supply costs at market prices or that SDG&E develops a power supply portfolio that includes ownership of generation. Sensitivity could then be analyzed assuming variation of SDG&E cost either above or below market.

- Power plant costs for Chula Vista appear to be optimistic given R. W. Beck's experience.

Cost Element	Analysis	R. W. Beck
Capital cost	$600/kW	$850/kW
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Gas price escalation	+0.7%/yr	2.3%/yr

- SDG&E prices are based on market prices that are projected to increase by 35% over the study period, while Chula Vista supply costs (per kWh) increase by only 8% due to low gas price escalation. This divergence results in a lower cost resource for the City.
- Exit fees are likely to decline over time as existing obligations are restructured or expire. Lower exit fees will result in greater savings to the City.
- A cost of $15 million for acquisition fees, severance, and start-up is likely very low.
- Human Resource cost calculations assume fringes of 15% – public agencies' fringe costs are generally closer to 40% or more.
- Human resource requirements appear to exclude purchasing, warehousing, buildings & ground, security, mail, legal, human resource, secretaries, and reception.

Methodology

- No comments.

Conclusions and Recommendations

- No reason given for consideration of using a Municipal Utility District or JPA.
- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.
- There should be more consistency in power supply costs between SDG&E and Chula Vista (at a minimum in a sensitivity analysis).

Gas Case

Assumptions

- No comments.

Methodology

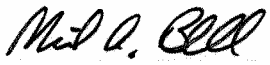
- There is discussion of pass-through of gas supply cost, but no discussion of carrying costs, storage, or risk management.

Conclusions and Recommendations

- Consideration should be given to the assumption/methodology comments.
- A discount rate of 6% to 7% would be more reasonable for the City. As the discount rate is decreased, savings to the City would increase.

Sincerely,

R. W. BECK, INC.



Michael A. Bell
Principal and Senior Director of Client Services

c: Ken Mellor